



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/728,343	12/01/2000	Gary Mark Crosbie	200-0188	4125

28395 7590 02/27/2003

BROOKS & KUSHMAN P.C./FGTI
1000 TOWN CENTER
22ND FLOOR
SOUTHFIELD, MI 48075

EXAMINER

SAMPLE, DAVID R

ART UNIT	PAPER NUMBER
----------	--------------

1755

DATE MAILED: 02/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n N .

09/728,343

Applicant(s)

CROSBIE, GARY MARK

Examiner

David Sample

Art Unit

1755

-- The MAILING DATE of this communication appears on the cover sheet with the c rrespondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 December 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Any rejections and/or objections, made in the previous Office Action, and not repeated below, are hereby withdrawn.

The rejection over Durschong (EP 1008563) in view of Bagger et al. (EP 1010675) has been withdrawn because the references, alone or in combination, fail to disclose or suggest the claimed glass composition.

The rejection over Fujinaka et al. (US Patent No. 4,806,334) is withdrawn in view of applicants' argument that the inclusion of CaO in the present invention would materially affect the novel and/or basic characteristics of the present invention.

The rejection over Dumbaugh (US Patent No. 3,501,322) is withdrawn in view of applicants' argument that the inclusion of La_2O_3 in the present invention would materially affect the novel and/or basic characteristics of the present invention in that the composition would not have a CTE compatible with sealing SOFC's.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Election/Restrictions

Applicant's election of Group I, claims 1-6 in Paper No. 5 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, and applicants have cancelled claims 7-12; the election has been treated as an election without traverse (MPEP § 818.03(a)).

Art Unit: 1755

Claims 7-12 are withdrawn from further consideration in view of the fact that the claims have been cancelled and pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 5.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-6 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The recitation in claims 1 and 3, "matrix composition remaining a glassy state after sealing at temperatures up to 1300°C", was not described by the specification, as originally filed. First, there is no recognition in the specification that the present composition can be sealed at 1300°C. The closest description is the disclosure that the composition may be used to seal a SOFC at a temperature of 1150-1200°C. See page 9, lines 10-12.

Moreover, the specification, as originally filed, fails to recognize the concept that the composition remains glassy after sealing. There is no description as to whether the composition crystallizes or remains glassy.

Art Unit: 1755

The examiner further notes that the claimed glass is formed by heating to 1500°C. However, this recitation refers to the formation of the glass. It does not relate to the subsequent heating of the glass to form a seal.

Claims 2 and 4-6 are rejected for failing to correct the deficiencies of the independent claims.

Claim Rejections - 35 USC § 102

Claims 1 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Gardner (US 3,935,017).

Gardner discloses a glass composition containing amounts of components that anticipate the glass described in instant claims 1 and 5. See Glass composition No. G1, col. 7.

The properties regarding chemical resistance and 'glassy structure after firing' are assumed to be inherent to the composition disclosed by the reference, because the glass of the reference is identical to the claimed glass and a glass's properties are determined by its composition. See MPEP 2112.

Response to Arguments

Applicant's arguments filed December 26, 2002 have been fully considered but they are not persuasive.

Rejection over Gardner (US Patent No. 3,935,017)

Applicants assert that the glass of Gardner is used as a sintering aid and would not be added to a composition in amounts more than 5-10 wt%. This argument is not deemed

Art Unit: 1755

persuasive. Instant claims 1 and 5 are directed to a glass composition. Therefore, the determination of the novelty of the composition would turn on whether the claimed glass composition is new and non-obvious. Gardner discloses a glass that is identical to the claimed glass composition, and therefore anticipates claims 1 and 5. In other words, the ultimate intended use of the presently claimed invention does not render the claims novel over an identically disclosed glass.

Applicants assert that the glass of Gardner is used as a sintering aid, which would require firing at a temperature of 1500 to 1600°C, whereas the present invention requires that the composition remains glassy when fired at 1300°C. This argument is not deemed persuasive. This argument appears to be directed to the ultimate intended utility of the composition. Again, a new use of an old composition does not render the old composition patentably. See MPEP 2112.

Applicants assert that a solid oxide fuel cell that is heated to 1500 to 1600°C would be ruined. This argument is not persuasive. The present claims are not directed to a solid oxide fuel cell.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

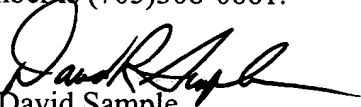
Art Unit: 1755

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Sample whose telephone number is (703)308-3825. The examiner can normally be reached on Monday to Thursday and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell can be reached on (703)308-3823. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9310 for regular communications and (703)872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.


David Sample
Primary Examiner
Art Unit 1755

DRS
February 26, 2003